



UNITED STATES PATENT AND TRADEMARK OFFICE

Et

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/537,658

06/06/2005

Ori Sarfati

2968/5

5181

7590

09/01/2006

Mark M. Friedman

Bill Polkinghorn

9003 Florin Way

Upper Marlboro, MD 20772

EXAMINER

RACHUBA, MAURINA T

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/537,658

Applicant(s)

SARFATI ET AL.

Examiner

M Rachuba

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 14-19 is/are rejected.
- 7) ☒ Claim(s) 8-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/21/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 16 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lee, 5,768,738. Please refer to figure 5 and its description.

3. Claims 1-7, 10, 11, 14, 15, and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Bianchi, 6,918,816. Please refer especially to figure 23 and column 9, lines 1-22. '816 discloses polishing system comprising at least one polishing station including a region of polishing film **542** overlying a substrate block **511**; a polishing fixture having a plurality of connector mounting holes (at **12**) disposed across an area of the polishing fixture, each of the connector mounting holes receiving an optical connector, and a working liquid supply arrangement including a plurality of working liquid release channels **574** for directing working liquid to regions adjacent to the connector mounting holes, at least one of the working liquid release channels being interspaced between a plurality of the connector mounting holes; and a drive system

302, 304 for generating relative motion between the polishing fixture and the at least one polishing station so as to polish the optical connectors; each of the connector mounting holes has a nearest neighbor spacing measured from the connector mounting hole to a nearest neighboring connector mounting hole, and a spacing from each of a majority of the connector mounting holes to a nearest one of the working liquid supply channels is not more than twice an average of the nearest neighbor spacings; a majority of the connector mounting holes are substantially equidistant from a nearest one of the working liquid supply channels; the polishing fixture includes a mounting plate, both the connector mounting holes and the working liquid supply channels being formed as openings through the mounting plate; the drive system is associated with the polishing fixture so as to move the polishing fixture along a two-dimensional polishing path relative to the at least one polishing station and wherein the at least one polishing station is configured to hold the region of polishing film static while the polishing fixture moves along the polishing path; the drive system is further configured to raise the polishing fixture out of contact with the at least one polishing station on completion of a polishing operation; a polishing film feed mechanism, see column 8 lines 21-64, for selectively exchanging the region of polishing film overlying the substrate block; and a computerized controller, see column 10, lines 5-17, for controlling the drive system and the feed mechanism, the controller being configured to actuate the drive system during a first polishing operation so as to move a batch of optical connectors in a polishing motion along a corresponding set of polishing profiles in contact with the static polishing film, and actuate the drive system during at least one additional polishing operation so

as to move a batch of optical connectors in a polishing motion along a corresponding set of polishing profiles in contact with the static polishing film, see column 10 lines 40 through column 12, lines 41, the polishing profiles of the additional polishing operation being interspaced with, and non- overlapping, the polishing profiles of the first polishing operation, and actuate the feed mechanism film. so as to advance the polishing. Note that all the movable parts move linearly, therefore there are at least three linear actuators, for the X-table, the Y-table, and to raise and lower the polishing pads.

Allowable Subject Matter

4. Claims 8-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or fairly teach the apparatus further comprising an optical cable support including at least one reel for receiving lengths of optical cables associated with the connectors, a displacement mechanism to allow displacement of the reel in at least one direction, a flexible optical circuit support rack for supporting a flexible optical circuit associated with the connectors being polished, the rack including a clamping plate extending vertically above the fixture and having a two dimensional array of bolt holes, or a cleaning station including a wiping cloth supply and receiving roll, a length of wiping cloth partially stored on the supply roll and stretched to the receiving roll so as to leave an exposed wiping cloth region; and a winding actuator associated with the receiving roll and configured for actuating the receiving roll so as to bring a new portion of the length of wiping cloth into

Art Unit: 3723

the exposed wiping cloth region. The most pertinent prior art, Bianchi, '816 does not disclose the use of reeled cable associated with the connectors, or a flexible circuit support rack. While '816 does disclose a wiping roller to clean the ends of the connectors, it is not disclosed that the wiping cloth is held stretched between two rollers, and the used portion wound on a receiving roller as new cloth is unwound from the supply roller.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other fiber optic polishing devices are cited of interest.

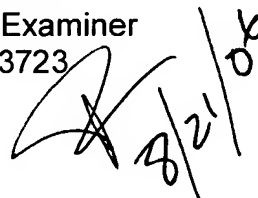
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 571-272-4493. The examiner can normally be reached on Monday-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M Rachuba
Primary Examiner
Art Unit 3723

A handwritten signature in black ink, followed by a vertical line and the date "8/21/08".